



National Transportation Safety Board Aviation Accident Final Report

Location:	SPRING CREEK, NC	Accident Number:	ATL88LA206
Date & Time:	07/01/1988, 1250 EDT	Registration:	N1534V
Aircraft:	CESSNA 172M	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE PLT REPORTED THAT THE ENGINE BEGAN TO RUN ROUGH & LOSE POWER AS THE AIRPLANE CLIMBED THROUGH 9,000 FT MSL. SHE THEN SWITCHED FUEL TANKS AND MOVED THE MIXTURE TO FULL RICH, BUT THE ENGINE CONTINUED TO LOSE POWER. CARB HEAT WAS NOT USED AT ANY TIME. A FORCED LDG WAS SUBSEQUENTLY MADE IN A FIELD WHERE THE AIRPLANE COLLIDED WITH A UTILITY POLE AND A DITCH. POST-CRASH EXAM OF THE ENGINE REVEALED NO EVIDENCE OF PREEXISTING MECHANICAL FAILURE OR MALFUNCTION. EXAMINATION OF AN ICING PROBABILITY CHART REVEALED THAT THE REPORTED WX CONDITIONS IN THE AREA WERE FAVORABLE FOR THE FORMATION OF MODERATE CARBURETOR ICING AT CRUISE POWER. THE CESSNA 172M OWNER'S MANUAL NOTES THAT A GRADUAL LOSS IN RPM AND EVENTUAL ENGINE ROUGHNESS MAY RESULT FROM THE FORMATION OF CARB ICE, AND PRESCRIBES THE USE OF CARB HEAT TO CLEAR THE ICE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: CLIMB - TO CRUISE

Findings

1. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. (C) CARBURETOR HEAT - NOT USED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

3. OBJECT - UTILITY POLE

Occurrence #4: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

4. TERRAIN CONDITION - DITCH

Factual Information

Pilot Information

Certificate:	Private	Age:	28, Female
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	02/01/1987
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	106 hours (Total, all aircraft), 58 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N1534V
Model/Series:	172M 172M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	17263650
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	05/26/1988, 100 Hour	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	46 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1903 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-E2D
Registered Owner:	BOB JONES UNIVERSITY	Rated Power:	150 hp
Operator:	CORNERSTONE AVIATION	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AVL, 2165 ft msl	Distance from Accident Site:	28 Nautical Miles
Observation Time:	1250 EDT	Direction from Accident Site:	150°
Lowest Cloud Condition:	Scattered / 3000 ft agl	Visibility	15 Miles
Lowest Ceiling:	Broken / 27000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	23° C / 7° C
Precipitation and Obscuration:			
Departure Point:	GREENVILLE, SC (GMU)	Type of Flight Plan Filed:	VFR
Destination:	BOWLING GREEN, KY (BWG)	Type of Clearance:	None
Departure Time:	1115 EDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	SCOTT STRICKLAND	Report Date:	09/11/1989
Additional Participating Persons:	WILLIAM R NEELY; W COLUMBIA, SC		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).